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**TB CARE I**

# **TB CARE I - Kenya**

**Year 2**

**Annual Report**

**October 1, 2011 – September 30, 2012**

**October 30, 2012**

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## List of Abbreviations

ACF	Allocable Cost Factor
AFB	Acid Fast Bacilli
APA	Annual Plan of Action
CDC	Centers for Disease Control and Prevention
CRL	Central Reference Laboratory
DHIS	Data Health Information System
DLTLD	Division of Leprosy, Tuberculosis and Lung Disease
DR TB	Drug Resistant Tuberculosis
DOTS	Directly Observed Treatment Short course
DST	Drug Sensitivity Testing
EQA	External Quality Assurance
HCW	Health Care Worker
HIV	Human Immunodeficiency Syndrome
ICT	Information and Communication Technology
IPT	Isoniazid Preventive Therapy
JICA	Japan International Cooperation Agency
KANCO	Kenya AIDS NGOs Consortium
KAPTLD	Kenya Association for Prevention of Tuberculosis and Lung Disease
KNCV	KONINKLIJKE NEDERLANDSE CENTRALE VERENIGING
M&E	Monitoring & Evaluation
MDR TB	Multi Drug Resistant Tuberculosis
MSH	Management Sciences for Health
OR	Operation Research
PMDT	Programmatic Management of Drug Resistant Tuberculosis
PPM	Public-Private Mix
SOP	Standard Operating Procedures
TA	Technical Assistance
TB	Tuberculosis
TB IC	Tuberculosis Infection Control
USAID	United States Agency for International Development

## Executive Summary

The TB CARE I partners involved with the implementation of APA 2 project were KNCV as the lead partner and MSH as a collaborating partner. In addition, there were two local partners, Kenya Association for Prevention of Tuberculosis and Lung Disease (KAPTLD) and Kenya AIDS NGOs Consortium (KANCO) sub-contracted by KNCV. The total budget for APA 2 was \$ 5,099,550. The USAID TB CARE I APA 2 project supported the Kenya National TB Programme by addressing all eight TB CARE I technical areas. These include universal access, laboratory support, infection control, TB/HIV collaborative activities, programmatic Management of Drug Resistant TB, Health systems strengthening, M&E, OR and surveillance and drug supply management.

Under universal access, the DLTLTD through KAPTLD was supported to increase quality of TB services delivered by all care providers. Through the implementation of PPM tools, there was a notable improvement in the contribution of private sector to the national case notification from about 7% in 2010 to 9% in 2011.

As part of laboratory strengthening efforts, TB CARE I continued to support the DLTLTD to implement EQA activities nationally. TB CARE I in partnership with JICA established an EQA center at the Central Reference Laboratory with a focal person to support EQA services nationally. These efforts have significantly improved the quality of AFB diagnostic services as well as the EQA coverage in the country. The EQA coverage prior to USAID support was as low as 28% and this has significantly increased to the current coverage of 86%. Subsequently, the EQA error rates have significantly dropped from 11.4% in 2009 to 2.5% in 2012 (April to June 2012 EQA data). Furthermore, TB CARE I APA 2 funding enabled Kenya to acquire the first three Gene Xpert machines in the public sector and this has greatly improved the turnaround time for MDR TB diagnosis within the Coast region. So far, 1084 samples have been tested using the three gene Xpert machines out of which 485 cases were MTB positive and 23 were Rif resistant (on 2nd line TB treatment).

TB CARE I provided the DLTLTD with support for the Programmatic Management of Drug Resistant TB by providing MDR TB patient support package, supporting MDR TB patients' contact tracing and technical assistance for PMDT guidelines revision, training material and SOP development. The MDR TB patient support package which includes clinical investigations for the patient, transport to and from the health facility and meals allowance contributed to MDR TB patients' treatment adherence and treatment outcome. In 2011, all the MDR TB patients (296) received this support. The cure rate for 2009 MDR TB patients cohort was 75.5% (40 patients out of 53).

During APA 2, TB CARE I emphasized the support for health systems strengthening. Activities under this outcome included support for ISO Certification process aimed at improving quality and efficiency for DLTLTD. TB CARE I also contributed to sustained supportive supervision at all levels (national, provincial and district) and strengthening of recording and reporting of real time data while improving accountability through the new Information and Communication Technology (ICT). The innovative ICT solution is the first of its kind to be implemented in Africa. The first phase of implementation of an innovative ICT solution to improve Programme Management at the DLTLTD which involved the initial development of the system and pilot phase at the field level is successfully completed. From APA 3, all the payments for MDR TB patient support as well as payment for supportive supervision will be done through the system.

## Introduction

Kenya is one of the 22 high TB burden countries and is ranked 10<sup>th</sup> according to the WHO Global Tuberculosis Report 2012. During the year 2011, 103,981 patients were notified (all forms of tuberculosis) representing a 2% decrease compared to the 106,083 cases reported in 2010. Kenya attained the global TB control targets (70/85) in 2007. The high burden of tuberculosis has mainly been attributed to the high prevalence of HIV, now estimated at 6.3 % for the general population. According to 2011 data, 39% of tuberculosis patients had HIV co-infection. Tuberculosis treatment success rate for the 2010 cohort is 87.14% for new smear positive pulmonary TB cases (n=36,260). The case detection rate (TB all forms) is 85% as reported in the WHO 2010 Global report.

The lead partner for TB CARE I project in Kenya is KNCV Tuberculosis Foundation with one collaborating partner in APA 2 (MSH) and two local implementing partners, KAPTLD and KANCO sub-awarded by KNCV. The geographic coverage of TB CARE I is national through the support provided to the TB Programme countrywide.

During APA 2, TB CARE I in Kenya addressed eight technical areas outlined below:

Technical Area	Expected Outcomes
1. Universal and Early Access	1.1 Increased demand for and use of high quality TB services and improve the satisfaction with the services provided (Population/Patient Centered Approach) 1.2 Increased quality of TB services delivered by all care providers (Supply)
2. Laboratories support	2.1 Ensured capacity, availability and quality of laboratory testing to support the diagnosis and monitoring of TB patients 2.2 Ensured optimal use of new approaches for laboratory confirmation of TB and incorporation of these approaches in national strategic laboratory plans Correctness of AFB microscopy results
3. Infection Control	3.1 Increased TB-IC Political Commitment
4. Programmatic Management of Drug Resistant TB	4.1 Improved treatment success of MDR TB
5. TB/HIV	5.2 Improved diagnosis of TB/HIV co-infection
6. Health System Strengthening	6.1 TB control is embedded as a priority within the national health strategies and plans, with matching domestic financing and supported by the engagement of partners 6.2 TB control components (drug supply and management, laboratories, community care, HRD and M&E) form an integral part of national plans, strategies and service delivery
7. M&E, OR and Surveillance	7.1 Strengthened TB surveillance Improved OR plans and implementation 7.2 Improved capacity of NTPs to analyze and use quality data for the management of the TB program
8. Drug Supply Management	8.1 Ensured nationwide systems for a sustainable supply of drugs

During the implementation period, some challenges were encountered. There was initial delay in implementation of some of the activities in the work plan. However, by the end of the last quarter, most of the activities had been implemented and the implementation status was about 75%. The project was also affected by high staff turn over due to unforeseen circumstances that resulted in some of the TB CARE I staff contracts not being renewed and the resignation of the TB CARE I Country Director. To ensure smooth implementation of the project, a new Country Director has been hired during the last month of the APA 2 and measures are place to replace the staff whose contracts were not extended.

## Universal Access

TB CARE I partners (KNCV and MSH) and two local partners sub-awardees of KNCV (KAPTLD and KANCO) were involved with activities under this outcome.

### Technical Outcomes

Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target	Result	Comments
				Y2	Y2	
1.1 Increased demand for and use of high quality TB services and improve the satisfaction with the services provided (Population/Patient Centered Approach)	1.1.3 Patients' Charter is implemented	Indicator Value: Score (0-3) based on definition	2	3	2	Patient Charter implementation was not done. See explanation below.
	1.1.4 Gender and poverty policy document developed	Indicator Value: Yes/No	N	Y	Y	Gender and Poverty Policy Document has been finalized.  A few copies to be printed in APA 3.
	1.1.5 Increased TB case finding in the target districts	Numerator: Number of TB cases registered per current quarter Denominator: Number of TB cases recorded in same quarter of the previous year	TBD	2	3	Activity not done.  This activity depended on the development of the Gender and Policy document. The document was finalized during the last quarter of APA 2.  Printing of the document will be done in APA 3.
1.2 Increased quality of TB services delivered by all care providers (Supply)	1.2.1 Appropriate tools from the PPM Toolkit are implemented	Indicator Value: Score (0-3) based on definition disaggregated by the tools selected by NTP-National Situational Analysis	1	2	3	7 out of the 14 PPM tools targeted in APA 2 are being implemented. These tools include: Advocacy & Communication M&E ISTC Private practitioners Workplaces TB/HIV Collaboration PMDT

	1.2.5 Proportion of TB cases (all forms) notified by Non-public providers in project sites	Numerator: number of TB Cases notified in non-public providers in project districts Denominator: number of total cases notified by the project districts	TBD	TBD	Data will be available early 2013	2011 data: 9% (9039 out of 103,981 cases notified in 2011).  2012: Data available by March 2013
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## Key Achievements

During APA 2, with support from TB CARE I, the country was able to improve the status of PPM implementation. Seven out of the 14 tools in the PPM tool kit were implemented, and as a result, the private sector contributed to about 9% of the national case notification (9,039 out of 103,981 cases notified nationally in 2011) which is an improvement from about 7% (7160 out of 106,083 cases notified) in 2010.

TB CARE I supported the DLTLTD to develop Poverty and Gender Policy Guidelines. The document provides a guide for addressing poverty and gender issues in TB control in the country as outlined in the DLTLTD 2011-2015 Strategic Plan. The objectives of Poverty and Gender initiatives are to promote equitable access to TB care services and reduce economic, geographical, gender-related and socio-cultural barriers to access TB services. It highlights key poverty and gender barriers to accessing TB care services and provides potential interventions for addressing barriers to access to TB care services.

With support from TB CARE I, draft training curriculum for Pediatric TB have been developed. The Pediatric training materials are meant to assist health care workers to diagnose TB in children.

## Challenges and Next Steps

The project was not able to achieve the outcome indicator on Patient Charter implementation. This activity was to be implemented by KANCO (sub awardee of KNCV). Before the implementation of the Patient Charter, it was necessary to determine the level of knowledge among health care workers and patients on the patient charter. An assessment to assess the health care workers knowledge on the Patient Charter has been conducted, the results will be available in the next reporting period. For the next step, if the results confirm that there is a gap in the knowledge of the Patient Charter among the health care workers and the patients; this will be addressed by providing training and sensitization meetings for health care workers and the TB patients otherwise the Patient Charter implementation will continue to be emphasized in all the regions.

The finalization of the Gender and Poverty document was delayed. The project had planned to use this policy document to increase TB case finding in selected districts by promoting equitable access to tuberculosis care through sensitization of HCWs at the peripheral facilities and implementation of tailored interventions based on the Gender and Poverty policy Guidelines. The policy document has been finalized at the end of APA 2 and printing will be done in APA 3. The next step is to agree with the DLTLTD how the policy can be implemented and one avenue is including it in the agenda of the upcoming biennial meeting to agree on the DLTLTD's plan for the next two years.

## Laboratories

The lead partner for the laboratory support was MSH. They provide regular technical support provided by a local laboratory officer that works closely with the DLTL, especially on EQA and implementation of Gene Xpert. When specialized needs arise additional support is provided by an international consultant.

### Technical Outcomes

Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target	Result	Comments
				Y2	Y2	
2.1 Ensured capacity, availability and quality of laboratory testing to support the diagnosis and monitoring of TB patients	2.1.2 Laboratories with working internal and external quality assurance programs for tests that they provide including: a) smear microscopy, b) culture, c) DST, and d) rapid molecular test	Numerator: Number of laboratories enrolled in EQA program meeting description above both nationwide and TB CARE areas  Denominator: All laboratories (national and TB CARE areas separately) that perform one or more of the above TB diagnostics	80 (1239/1549)	80%	86% (1426/1657)	Latest EQA data (April to June 2012)  Data for July to September 2012 will be available next quarter
	2.1.5 proportion of retreatment specimens submitted for culture/DST	Numerator: Number of retreatment specimens submitted=about 75000 Denominator: Number of total retreatment cases notified=about 10,000	70(7000/10000)	75	83% (8,870/10686)	In 2011, 83% of retreatment cases (8870 out of 10686) were screened for drug resistance at the CRL.
2.3 Ensured optimal use of new approaches for laboratory confirmation of TB and incorporation of these approaches in national strategic laboratory plans	2.3.1 New technologies have been introduced	Number for each technique below by Central, Provincial, district and Peripheral levels 1. TB culture 2. First line DST 3. Second-line DST 4. HAIN MTBDRplus 5. GeneXpert 6. LED microscopy	1 (Gene Xpert)	1	1	The target was to introduce one new technology in APA 2, i.e Gene Xpert.



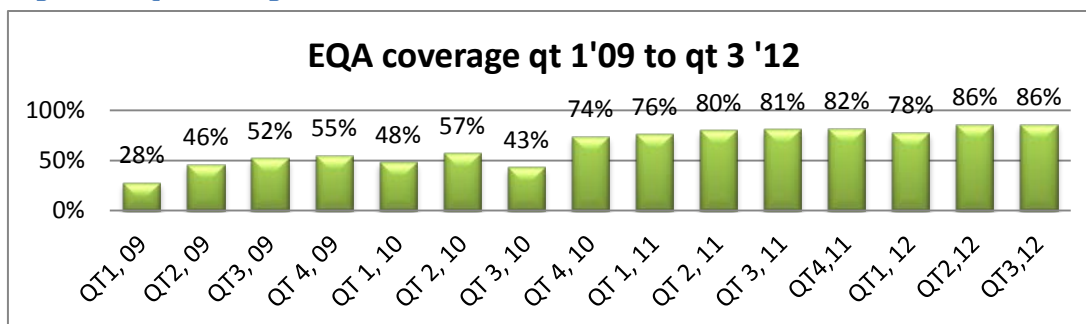
	2.3.2 Laboratories offering rapid tests for TB or drug-resistant TB	Number of laboratories using GeneXpert MTB/RIF and HAIN MTBDRplus disaggregated by type of technology and also disaggregated by national and TB CARE areas.	3 (Gene Xpert)	3	3	1 laboratory using HAIN MTBDRplus (CRL)  3 laboratories supported by TB CARE I using Gene Xpert in Coast Region There are a total of 22 Gene Xpert machines in the country. 3 are supported by TB CARE I, the rest are supported by different partners.
	2.3.3 Rapid tests conducted	Annual number of tests (separately for GeneXpert MTB/RIF and HAIN MTBDRplus) conducted disaggregated by national and TB CARE areas.	0	2000	1084	A total of 1084 samples tested (Oct 2011 to Sept 2012): -485 cases were MTB positive -23 were Rif resistant (on 2nd line TB treatment)

## Key Achievements

With support from TB CARE I in partnership with JICA, the DLTD has been able to set up an EQA Centre at the Central Reference Laboratory with a focal person to support EQA activities countrywide. This will greatly contribute to

**Figure 1: EQA Coverage**

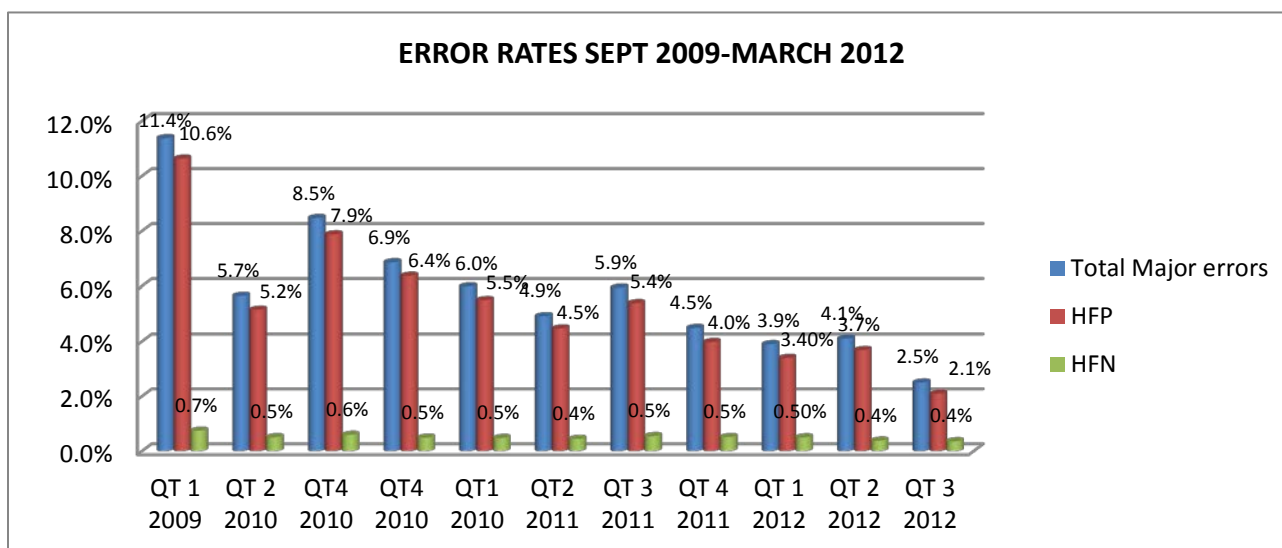
the sustained high level of both the EQA coverage and the quality of smear microscopy



diagnostic services. The EQA coverage prior to USAID support was as low as 28% and this has significantly increased to the current coverage of 86% (please refer to figure 1 and 2 below). Additionally, the EQA error rates have significantly dropped from 11.4% in 2009 to 2.5% for April to

June 2012.

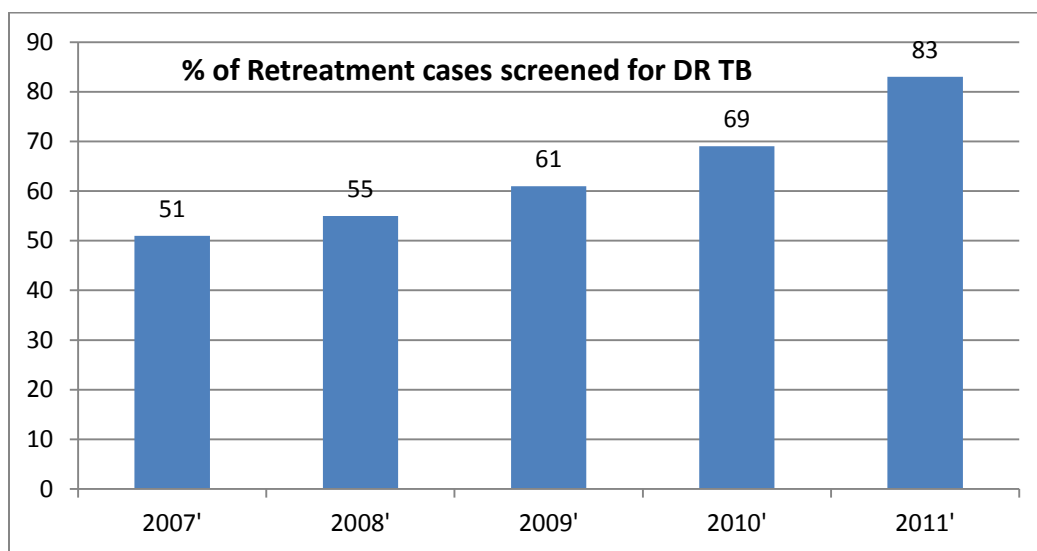
**Figure 2: Error rates**



TB CARE I Kenya has been supporting the DLTLD to improve tuberculosis (TB) case detection; including smear-negative disease often associated with HIV as well as expanded capacity to diagnose multidrug-resistant tuberculosis (MDR-TB). With support from APA 2, TB CARE I Kenya acquired three Gene Xpert machines in October 2011. These were the first Gene Xpert machines within the public sector in the country. The machines were clustered in one region (Coast province) in Coast provincial General Hospital, Port Reitz District Hospital and Likoni District Hospital. The decision was based on the workload and WHO recommendation of clustering. After installation of the machines, the laboratory personnel were trained on how to use the machines and clinicians from Coast region sensitized through technical support from MSF Belgium. Three follow up visits have been made to support the smooth implementation of Gene Xpert in the region. So far a total of 1084 samples have been tested using the machines, out of which 485 cases were MTB positive with 65 new cases diagnosed. The RIF resistant cases diagnosed by end of September were 23 with 11 confirmed as MDR TB and the rest are still on-going confirmation.

USAID has continued to support the DLTLD to implement the MDR TB surveillance system by supporting the transportation of sputum specimen from the peripheral laboratory facilities to the CRL laboratory. With support from TB CARE I, the percentage of retreatment cases screened for drug resistance went up to 83% in 2011 from 69% in 2010. (Please refer to figure 3 below).

**Figure 3: DR TB Surveillance**



### Challenges and Next Steps

The implementation of Gene Xpert in the country is not well coordinated. There are 22 Gene Xpert machines in the country out of which 3 machines were procured and continue to be supported by TB CARE I. The rest of the Gene Xpert machines are supported by different partners in the country. The national data on the number of tests conducted using the 22 Gene Xpert machines is not available. Data is only available for the 3 Gene Xpert machines supported by TB CARE I. TB CARE I office will try to bring this issue to the attention of DLTLD in the next project phase.

## Infection Control

Under this outcome, the project planned to support the DLTLD to develop training materials for IPC. The lead partner for this activity was KNCV.

### Technical Outcomes

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target Y2	Result Y2	Comments
(#)	3.1 Increased TB-IC Political Commitment	3.1.4 TBIC training material developed	TB IC training materials developed Indicator Value: Yes/No	N	Y	Draft developed.	Finalization of the draft document planned in October 2012

### Key Achievements

In APA 2, TB CARE I project had planned to develop TB Infection control training curriculum. A draft training curriculum is in place, to be finalized in October 2012. With support from APA 3, the training curriculum will be printed and disseminated to support the strengthening of health care workers capacity in TB IC.

### Challenges and Next Steps

The TB IC training curriculum has been finalized with TB CARE I APA 2 support. The next step will be the printing and dissemination of the training manual. However, due to the budget constraint during APA 3 planning, this activity was ranked as medium priority for the DLTLD and therefore no budget was allocated for it. It was included in the waiting list of APA 3 work plan to be implemented after savings are available. In the meantime, other partners will be approached to explore additional support.

## Programmatic Management of Drug Resistant TB (PMDT)

PMDT is one of the priority technical areas supported by TB CARE I. The lead partner for activities under this outcome was KNCV. The MDR TB patient support include support for clinical investigation, transport and meal allowance.

### Technical Outcomes

Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target	Result	Comments
				Y2	Y2	
4.1 Improved treatment success of MDR TB	4.1.5 MDR Patients getting patient support through TB CARE I	Number of MDR patients getting patient support package through TB CARE I	160	210	296	296 (100%) MDR TB patients supported through TB CARE I. All the MDR TB patients are supported.

### Key Achievements

In Kenya MDR TB treatment has been decentralized to 134 treatment sites distributed throughout the country. With funding from TB CARE I APA 2, the project supported 296 MDR TB patients to be able to adhere to medication and therefore contributing to successful treatment outcomes for MDR TB. By providing nutritional support, transport to health facilities and clinical investigations, the MDR TB patients were enabled to continue with MDR TB treatment. In 2011, the MDR TB treatment cure rate (2009 treatment cohort) was 74% (40 out of 53 patients).

### Challenges and Next Steps

The current system that has been used for payment of MDR TB patient support was not very efficient. The support for MDR TB patients was provided through the HCWs and with this arrangement it is not possible to ascertain if the money reached the beneficiary in good time.

To address this challenge, MDR patient support will be included in the innovative ICT solution developed to support Programme Management by strengthening and improving governance and accountability through utilization of M-pesa to make payments for supervision and MDR TB patient support. The initial development of the system and pilot phase at the field level is completed and the next steps involve the launch and roll out in all the regions of the country.

## TB/HIV

Under this technical area, the plan was to print IPT tools and distribute in TB/HIV sites. The lead partner is KNCV.

### Technical Outcomes

Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target	Result	Comments
				Y2	Y2	
5.2 Improved diagnosis of TB/HIV co-infection	5.2.5 TB/HIV sites with IPT tools	Number of TB/HIV sites with updated IPT tools	TBD	220	0	Activity not done.  The IPT Tools have been finalized awaiting printing before they can be distributed to the TB/HIV sites.

### Key Achievements

With support from USAID, TB CARE I project had planned to print 3,000 copies of IPT tools to support the diagnosis of TB/HIV co-infection. However, IPT tools have not been printed and this activity has been moved to APA 3.

### Challenges and Next Steps

The plan was to print and distribute updated IPT tools 220 TB/HIV sites. However, this activity was not done due to other competing priorities for the TB program.

## Health System Strengthening (HSS)

This is one of the TB CARE I priority technical areas lead by KNCV. The activities supported DLTLTD Programme management and include support for the DLTLTD ISO Certification, use of new ICT technology and supportive supervision to improve programme management.

### Technical Outcomes

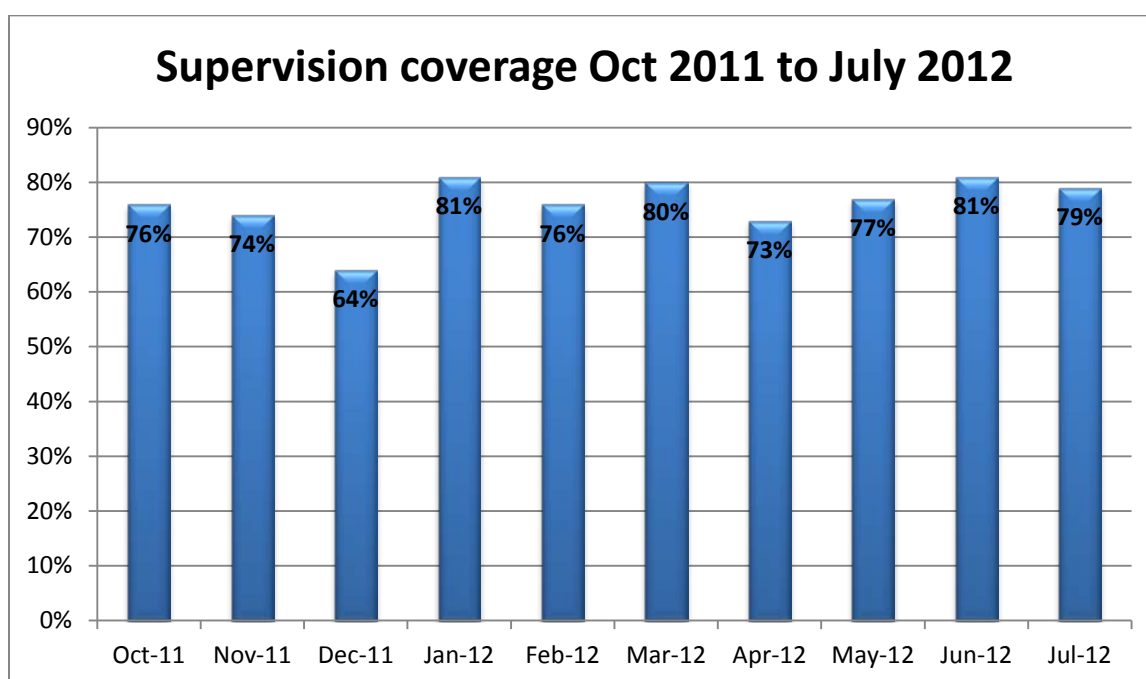
Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target	Result	Comments
				Y2	Y2	
6.1 TB control is embedded as a priority within the national health strategies and plans, with matching domestic financing and supported by the engagement of partners	6.1.3 CCM and/or other coordinating mechanisms include TB civil society members and TB patient groups	Indicator Value: Yes/No	Y	Y	Y	With support from TB CARE I contributed by ensuring the coordination mechanisms were sustained.
	6.1.4 NTP ISO Certified	ISO certification Indicator Value: Yes/No	N	Y	N	ISO Certification process is ongoing with support from TB CARE I
	6.1.6 Use of new technology in TB program Management	Real time reporting using mobile technology in place for program management  Indicator Value: Yes/No	N	Y	Y	Initial implementation phase successfully completed.
<b>6.2 TB control components (drug supply and management, laboratories, community care, HRD and M&amp;E) form an integral part of national plans, strategies and service delivery</b>	6.2.1 Supervisory visits conducted according to country supervisory standards	Number of annual supervisory visits conducted to DOTs sites=16,000 visits Denominator: Number of annual supervisory visits planned=21,500 visits.	78%	75%	76%	October 2011 to July 2012 percent supervision conducted is 76% (21,224 visits conducted out of 27,897 visits scheduled).  Data for August and September to be provided next quarter

### Key Achievements

The DLTLTD is in the process of accreditation by ISO 9001:2008 standards with support from TB CARE I. This activity is one of the top priorities not only for DLTLTD but also for the Ministry of Public Health and Sanitation. This certification will make the NTP a well-organized, accountable and transparent entity of the government of Kenya in designing policies, coordinating national level activities, resource mobilization and appropriate utilization. Hence, all stakeholders working with Division of Leprosy TB and lung Diseases (DLTLTD) are expected to benefit from this certification. USAID/

TB CARE I has been supporting this process. The process requires that two audit sessions be conducted by the Kenya Bureau of standards before the ISO certification is achieved. The first stage of audit has been conducted while the second audit will take place in APA 3. The ISO certification status is expected to be achieved by the end of December 2012.

Support supervision is the core of TB Programme in the country that enables TB patients to receive appropriate care and support as well ensures that data is available to support and improve the management of the TB program. With support from TB CARE I, Kenya has been able to maintain supervision at all levels (national, provincial and district). In APA 2 (October 2011 to July 2012), 21,224 supervision visits out of 27,897 visits (76%) scheduled were conducted to health facilities countrywide. The support supervision visits enable the TB programme to pick up and address issues (at the health facility level) that hinder the implementation early enough and improve the performance of the TB programme. A good example is when the District TB coordinators visit health facilities and notice for example the drug supplies are running low; they are able to inform the Provincial TB Coordinators who can follow up with relevant people and ensure the drugs are supplied before they are completely run out. Additionally, the District TB Coordinators provide on the job training for health care workers at the facilities. This is very important especially in areas where there is high staff turn over or where HCWs go through work station rotations, the focal person for TB in such health facilities changes very frequently. This means that their replacement needs to be given proper orientation and support to implement TB control activities otherwise they may not be able to provide proper care and support for the TB patients registered in their facilities.



With support from TB CARE I, the first phase of implementation of an innovative ICT solution, the first of its kind in Africa to improve Programme Management at the DLTLTD is successfully completed. The innovative ICT solution (also referred to as "Safaricom Project") is based on two approaches that ensure real time reporting is done to enable managers to easily access data for informed decisions at all levels:

1. Strengthening and improving recording and reporting with real time data from the facility level up to the central unit, as well as provision of feedback.
2. Strengthening and improving governance and accountability through utilization of M-pesa to make payments for supervision and MDR TB patient support.

The first phase of the Safaricom Project involved the creation of patient data capture application that is used to collect patient data, patient management system that provides information on patient management and the payment system which is done through the mobile money transfer. The next step was the integration of the patient management system and the payment system with the DHIS to support payments. To enable the users to make use of the system, training modules including video demonstrations have also been developed. The system was piloted in three TB regions (Central, Western and Rift Valley North regions). During the pilot sessions issues were identified and recommendations made to improve the system. The roll out of the system which is planned to take place in phases has already started with the Coast region. MDR TB patients can now receive the patient support money directly

through mobile money transfer to their phones and District TB Coordinators can receive payments for conducting supervision visits. The initial development of the system and pilot phase at the field level is completed and the next steps involve the launch and roll out in all the regions of the country.

### **Challenges and Next Steps**

Although a big proportion of the TB CARE I budget (20%) is for support supervision, the activity does not inform the TB programme on the quality of the supervision support. It only provides information on the number of health facilities visited compared to planned visits. To add value to this support, TB CARE I is in discussion with the TB Programme to address quality issues. For example steps are now being taken to address data quality management including with increased partnership between the M&E staff of the DLTLTD and TB CARE I. Furthermore, the roll out of ICT technology will strengthen the current surveillance system. However, data quality remains an important issue and is a focus in the APA 3 work plan, implementing the new ICT technology without strong data management would not improve the management of the TB Programme as is its intention.



## Monitoring & Evaluation, Surveillance and OR

Under this outcome, TB CARE I supported the strengthening of the surveillance system including the development of Data Management Manual. The lead partner for the activities under this outcome is KNCV.

### Technical Outcomes

Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target	Result	Comments
				Y2	Y2	
<b>7.1 Strengthened TB surveillance</b>	7.1.1 An electronic recording and reporting system for routine surveillance exists at national and/or sub-national levels	Indicator Value: Yes/No	Yes	Yes	Yes	An electronic recording and reporting system exists for the national, provincial levels and partly district level (in 73 districts out of 215 districts).
	7.1.2 Diagnosed cases captured by routine surveillance system	Numerator: Number of cases in the routine surveillance system Denominator: Total number of cases in the routine surveillance system including laboratory and clinical diagnostic registers including in private sector.	TBD		19935	19,935 out of 103,981 (19%) cases captured through the electronic surveillance system.
<b>7.2 Improved capacity of NTPs to analyze and use quality data for the management of the TB program</b>	7.2.2 NTP provides regular feedback from central to lower levels	Numerator: Number of quarterly feedback reports prepared and disseminated to provincial level (24 feedbacks during 24 review meeting sessions) Denominator: Total number of expected provincial level review meetings with	Unknown	50%	50% (24/48)	Feedback from central to lower levels provided during quarterly review meetings (regional) and half year review meetings.

		district TB coordinators in a year (48 review meetings)				
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## Key Achievements

During APA 2, TB CARE I continued to support the DLTLD to improve the Programme Management supporting review meetings for District TB coordinators and Provincial (regional) TB Coordinators. These meetings provide a good forum for DLTLD officers and partners implementing TB activities in the country to share experiences, verify TB data, and address challenges to support better implementation of the TB program. For example, District TB Coordinators and provincial TB Coordinators are able to follow up and confirm information for patients who transfer to other districts or other provinces for further patients follow up.

Additionally, during the review meetings, the TB CARE I M& E officers provide regular feedback on the TB CARE I work plan supported activities, such as supervision and MDR TB patient support. This feedback has proved to be helpful as the District TB Coordinators have been able to improve their reports and response to issues arising when they are conducting supportive supervision.



Participant presents data during national review meeting

## Challenges and Next Step

Recommendations from previous technical assistance visits have identified gaps in the data management systems for the DLTLD. The development of Data Management Manual for the data management procedures has been prioritized and a draft Data Management Manual is now in place. The manual will be finalized in APA 3.

## Drug supply and management

This is a new technical area to support the DLTLD on crisis management of TB commodities in areas of non-tax related port clearance and emergency drug and lab reagent distribution. The lead partner working on this technical area is KNCV.

### Technical Outcomes

Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target	Result	Comments
				Y2	Y2	
8.1 Ensured nationwide systems for a sustainable supply of drugs	8.1.4 NTP request on TB commodity addressed	Assistance on reducing clearance delay and emergency drug distribution	Unknown	10	5	Support provided to distribute drugs to three regions: Rift Valley North, Nyanza South & Western and two shipments of drugs supported for clearance

### Key Achievements

With support of TB CARE I, the national anti TB drug supply chain was cushioned against drug clearance delays and emergency drug distribution which greatly contributed to sustainable supply of drugs.

### Challenges and Next Steps

TB CARE I will provide financial support to the DLTLD for custom clearance of anti TB drugs during the next funding phase.